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Kevin A. Sheppard, P.E.
Public Works Director

Frederick J. McNeill, P.E.
Chief Engineer

CITY OF MANCHESTER
Highway Department
Environmental Protection Division

February 20, 2009

EPA – Region 1
Attn: Thelma Murphy
Office of Ecosystem Protection (CIP)
One Congress Street
Boston, Massachusetts 02114-2023

#09-02-EPC

Re: Draft New Hampshire Small MS4 General Permit Comments

Dear Ms. Murphy:

The City of Manchester is dedicated to protecting the environment and providing our residents with a clean, safe, and environmentally sound place to live. It is our responsibility to provide this environment in a fiscally responsible manner. The EPA, the NHDES, and the regulated communities are working together as a team to improve water quality in the State of New Hampshire. It is this team approach that we need to use to reach our common goal. Water quality is not just a municipal issue; but a regional issue and national issue as well.

The City of Manchester is the largest City in the State of New Hampshire and because of this we are placed in a leadership role. It is this leadership role that we take very seriously. The NHDES looks to us in this leadership role to assist with the other communities in the State. The City works with other communities in our region on stormwater, wastewater, and water quality issues. This regional approach has been a strength that all the members have gained from. Members of the City of Manchester staff are active in the professional community making presentations on environmental issues and being members of professional organizations.

I asked members of my staff to review the latest permit requirements and to attend and participate in the public hearing that was held on January 28, 2009 in Portsmouth, NH. We offer the following comments and suggestions on the permit requirements.

1.10 Stormwater Management Program (SWMP)

Under c. *"The permittee is encouraged to maintain an adequate funding source for the implementation of this program. Adequate funding means that a consistent source of revenue exists for the program."*

The concern that we have along with the other communities that were represented at the public hearing is with the costs associated with this program. The City of Manchester estimates that compliance with this permit will cost at a minimum an additional $850,000 per year above what is already being spent to comply with the current permit. This cost is 1/3 of the entire personnel cost for a staff of 44 employees at the wastewater treatment plant. In this economic environment with budget cuts and lost revenues the communities that are regulated under this permit including Manchester would have a difficult time ensuring these funds will be available and therefore

complying with this section based on the current permit requirements and associated costs. Currently stormwater is funded under the City's general fund and is therefore subject to budget cuts due to the budget constraints that we all are facing.

Under b., the 120 day time frame would be sufficient to modify existing BMPs, but is not enough time to review, plan and update measurable goals. Previous goals will first have to be reviewed to determine effectiveness. Updating goals should be given at least one year of time.

2.2.2 Discharge to an Impaired Water without an Approved TMDL

"The permittee shall: evaluate discharges to impaired waters."

What is considered an evaluation? The EPA needs to make this language more clear. In regards to impairments, water bodies in NH are considered impaired for mercury due to atmospheric deposition. This is caused by acid rain originating from the Midwest and is not caused by the communities MS4. This same rationale would also apply to aluminum in rivers where aluminum would be naturally occurring due to low pH waters dissolving this metal out from the bottom of streams. We should not be required to sample for these or similar parameters or develop and implement BMPs to address these pollutants. This requirement also has implications under sections 2.3.6 and 3.0.

2.2.3 Discharge to a Chloride Impaired Water in New Hampshire

"The permittee shall develop and implement a written plan to reduce chloride in discharges from the permittee's MS4 to those chloride impaired surface waters. The requirements in this plan shall apply to all parking lots, roads, and chloride-based deicing chemicals piles that drain directly or indirectly to all permittee's MS4."

Stevens Pond is one of the bodies of water that is impaired for chlorides and it receives direct discharges from Interstate 93 which is owned and maintained by the NH Department of Transportation (DOT). Section 7.0, Requirements for Transportation Agencies has no mention of chloride abatement. Can it be assumed that the EPA is expecting cities and town like Manchester to resolve the chloride issues created by the NH DOT? The NH DOT should be required to reduce the chloride loadings from Interstate 93 to Stevens Pond by placing language in section 7.0 similar to this language.

In the first bullet item under this section, Manchester would suggest that a reference to 2.3.2.1(c)ii and iv be included to solidify in the permittee's mind that the requirement is not for residential units or developers. Also, a definition of parking lot is needed. A number of parking spaces should be spelled out. Manchester believes 10 spaces should be the minimum considered. Otherwise, every small beauty parlor, sandwich shop, dry cleaner, etc with two to nine parking spaces would be covered under the regulation. This would make it very difficult and labor intensive to implement.

In this section of the permit the EPA is requiring the municipalities to regulate the application of deicing chemicals on private parking lots and to gather data on the application of these products per storm per account. There are many issues that are raised based on these requirements. The information that will be provided, if any, will be merely an estimate on the part of the property owner or the contractor that is applying the chemicals. Many small commercial accounts will hire the same private landscaping or plowing contractor to do their lots. One truck full of salt may be used to treat five or more businesses. There is also the likelihood that the salt is well mixed with sand (a mix of 80/20, 70/30, 60/40 it all depends on the weather, the loader operator, etc.).

Not all applications of deicing chemicals are associated with a storm event. Melting and refreezing can cause the contractor to apply deicing chemicals and this is not considered a storm event. There is a requirement to educate users of deicing materials on BMPs (storage, use, and housekeeping) for their uses and effects on the environment. The EPA needs to define what is considered education in regards to this requirement. The winter

maintenance contractors can change each year based on bid prices. This will affect training and the effectiveness of the training. Monitoring private contractors and private property would be very difficult.

The EPA is also requiring all public and private applicators to use application rates that are at least as stringent as those specified in the State of Minnesota guidance documents. The concern here is with liability. If the municipalities define application rates and somebody is injured by way of an unsafe surface, will the injured party or the private property owner issue a lawsuit to that municipality because they defined their application rate for the deicing chemicals?

The suggestion is that the EPA, the NHDES, and the NH DOT work together to develop a statewide program on the proper application of deicing chemicals. Workshops can be held to educate the applicators. A public service message can be run to educate the general public on the impact that deicing chemicals make on the environment and the need to reduce the use of these chemicals. The general public also needs to be educated on safe driving practices during storm events. The driving public expects roads free of snow and ice and they do not expect to slowdown. This year in NH there was some major traffic accidents associated with winter storm events.

2.3.2 Public Education and Outreach

Manchester supports the public education element of the permit. We need to attempt to educate the public to be more environmentally conscious. The permit states *"The ultimate goal of a public education program is to create a change in behavior and knowledge so that pollutants in stormwater are reduced."*

How does the EPA expect the municipality to measure a change in behavior and knowledge gained from the educational message? Follow-up surveys are ineffective. Many are not completed or returned including the online surveys. Some additional guidance is needed from the EPA on this requirement. The City of Manchester anticipates budgeting $10,000 above what is already spent to comply with this requirement. The EPA and the NHDES should work together to develop public service messages and give guidance to the municipalities on messages for the different audiences.

2.3.4 Illicit Discharge Detection and Elimination (IDDE) Program & 3.0 Outfall Monitoring Program

The outfall inventory requirement has already been completed by most communities. In the City of Manchester our MS4 has been mapped including the location of the outfalls. This information is included in our GIS. Currently the outfalls are inspected on an annual basis and sampled as necessary during dry weather flow conditions. Any discharge that is actively flowing whether it is via a pipe outfall or a stream is sampled and tested for E-Coli. If the staff conducting the sampling suspects that this discharge could contain any other pollutants then they sample the outfall for these parameters. The sampling for E-Coli is a good indicator of an illicit discharge along with the visual inspection. If an elevated result is obtained, then the outfall is sampled up stream to try and locate the source of the contamination.

The requirements to test the outfalls for conductivity, turbidity, pH, chlorine, temperature, surfactants (as MBAS), potassium, ammonia, in addition to E-Coli, and the impairments of the water body as stated under 3.0 Outfall Monitoring Program for 25% of the outfalls per year for both dry weather and wet weather conditions is very costly and time consuming. The City of Manchester estimates that the sampling protocols under sections 2.3.4 and 3.0 will cost the City approximately $15,000 above what is already being spent.

The individual parameters may indicate a potential problem, but the reality is that the source of the problem is an unregulated entity under the EPA program. Agriculture and private residences are exempt under stormwater regulations. However through fertilization, car washing activities and general practices associated with each will show the largest impact to ammonia, potassium, phosphorus, surfactants and pH. Conductivity will also increase because of the salts associated with these exempt stormwater sources. Until all entities are regulated, especially agriculture, it will be impossible to show improvements to water quality criteria on a consistent basis. Manchester and other communities believe that the current practice of checking for bacteria, along with the

sensory observations outlined in the "Outfall Inventory" section, complies with the IDDE and is sufficient until exemptions are lifted from the current stormwater program.
The water bodies are already being sampled for pollutants. The City of Manchester performs the dry weather screening as outlined above, the NHDES also performs dry weather screening, and the NHDES performs water quality testing of water bodies in the City of Manchester and in the State of NH. Urban ponds are sampled during the summer months by the urban ponds program, pond groups, and the City of Manchester Health Department. The City of Manchester has just completed a watershed restoration plan for Nutt Pond and we will be doing more extensive sampling on the outfalls for parameters that were identified in the plan. We are also going to be looking at other BMPs in the watershed to help with loadings to the pond. The City of Manchester is a CSO community and is required to sample the CSO outfalls on an annual basis per our NPDES wastewater discharge permit.

The City of Manchester along with other communities in conjunction with the U.S. Army Corps of Engineers and CDM has been participating in the Merrimack River Study Phases I & II. This is a watershed based approach to the river WQ issues. A report was generated on the findings from the first phase of the study. The second phase is underway. The City of Manchester is contributing $22,000 per year to this study. Studies such as this in my opinion goes a lot further in addressing the WQ issues with the Merrimack River then us going out and collecting samples for any rainfall event of sufficient intensity to produce a discharge during any period of the event.

Manchester would suggest that EPA provide municipalities with more flexibility to develop their own sampling protocol to address water quality issues in their MS4 community. EPA can then review each individual plan to determine if it meets the intent of the stormwater program. The EPA Stormwater section may be better served if that branch considers CSO communities requirements at their outfalls under other EPA issued permits. Municipalities working with the NHDES, watershed / pond organizations, and other entities can perform good quality sampling and make informed decisions on addressing WQ issues. Funds then can be obtained to develop and implement BMPs to address these issues.

Section 2.3.4.5 states a separate storm sewer system map must be finished by two (2) years from the effective date of this permit. This is in conflict with section 1.10.3 bullet one that states mapping must be completed three (3) years form the effective date of the permit and even cites section 2.3.4.5.

2.3.6.8 Directly Connected Impervious Area

The requirement is to estimate the impervious area within one (1) year. Manchester has accomplished this via the completed GIS inventory mapping. Many communities are not as far along as Manchester. This requirement should dovetail with the three year mapping requirement. Another 60 days should be given to complete the delineation. The time frame should be changed to consider this.

2.3.7 Good House Keeping and Pollution Prevention for Permittee Owned Operations

"Within 6 months of the effective date of the permit, develop an inventory of all floor drains within all permittee-owned buildings. The inventory must be updated annually. Ensure that all floor drains discharge to appropriate locations."

This requirement is moving outside the intention of the stormwater permit. The permit is to address stormwater discharges. These drains are interior and will not be subject to rainfall events. These are typically covered under the industrial pretreatment regulations as outlined in 40 CFR Part 403. This requirement goes beyond what was required in the MSGP. The interior floor drains discharge to sanitary sewers and is subject to plumbing codes to ensure that they indeed discharge to the sanitary and not the storm sewer. I would suggest that this requirement be removed from this permit.

The requirements under Roadways and Storm Sewers requires the following; *"Catch basins shall be inspected annually. Catch basins shall be cleaned a minimum of once every other year."*

This requirement is the most expensive cost to all Phase II communities throughout New England. This would be very costly to the City of Manchester. The City has 14,000 catch basins in its system. The cost to clean half of the basins every year would cost the City approximately $350,000 per year and the cost to inspect the other half of the catch basins would be approximately $350,000 per year. There is also a requirement to inspect all stormwater structures annually. The City has 3,000 drainage manholes that would cost approximately $150,000 per year to inspect them. Total compliance cost for just this part of the permit would exceed $850,000 annually.

Currently, as documented in the past five year annual stormwater reports, Manchester cleans between 1,800 and 2,000 catch basins (about 15% of the City's basins). One thousand of these are hired out to a private contractor and between 800 to 1,000 are completed by the City. The catch basin contractor also works for other communities and the NH DOT. We are hard pressed to get them to fulfill their commitment of 1,000 catch basins cleaned annually.

The City has two vactor trucks. These are used to clean sewer and drain lines, clean siphons, clean sewer manholes as well as drain manholes along with use for emergency blockages and root cutting. Neither Manchester, nor other communities could fulfill this requirement as there is not nearly enough equipment to get this work completed. Manchester would have to buy a third and possibly a fourth vactor truck or, discontinue the sewer drain and siphon cleaning program. This is in direct conflict with the CMOM requirements of our NPDES. As you can see this places Manchester along with all other communities between a rock and a hard place and sets every permittee up for failure. It may be prudent to place the 20% criteria for cleaning in the permit to cover the five-year permit cycle. Manchester could struggle to go from 15% to 20% and probably accomplish this, but it would be improbable to go from 15% to 50%.

The above rationale would also apply to the inspection requirement. Rather than 100% every year, Manchester believes that an easing into the program of 20% a year is the upper end of the labor intensive limit without adding staff to the already anticipated $875,000 annual increase the current proposal requires. The dry weather screening reflects this rational, and as the catch basin cleaning and inspection is so much more labor and cost intensive, justifies completing this requirement over the five-year permit cycle.

The City of Manchester currently does the following for the stormwater program. The system is 60% combined. Most of the catch basins, drainage structures, and storm sewers discharge to the combined system and therefore to the Wastewater Treatment Facility. Currently the City cleans all the catch basins that surround the urban ponds twice per year to protect these water bodies from sediment loadings. The structural BMPs such as baffle tanks, forebays, and particle separators get inspected twice per year and they get cleaned at least once per year. Many do get cleaned twice per year. Our crews also clean some other catch basins. The City of Manchester contracts out catch basin cleaning above what they clean with their own crews. The contractor cleans approximately 1,000 basins per year based on the funds allocated.

Our past five annual reports have shown that this is adequate to address stormwater issues from the previous permit. We believe a continuation of this level of effort, with a modest incremental increase in expectations is warranted, but not to the level as proposed in the draft permit.

The municipalities that own or discharge to a Wastewater Treatment Facility are required to develop a Capacity, Management, Operation, and Maintenance (CMOM) program for their collection system under the NPDES permit requirements. I suggest that the EPA allows the communities to maintain their collection system including the storm sewer system under their CMOM requirements. They can develop their cleaning schedule based on their knowledge of their system, not have a general requirement for everyone. It is a way to integrate the maintenance of the storm and sanitary sewers together whether the system is combined in the case of Manchester or separate.

2.3.7.2 Stormwater Pollution Prevention Plan (SWPPP)

The EPA is requiring a SWPPP to be developed for maintenance garages, public works facilities, transfer facilities, and other waste handling facilities if they weren't already covered by the MSGP. Is it the intent of the

EPA to have the municipality use the same format as the MSGP and will the annual reporting requirements be subject to the same reporting requirements under the MSGP? The EPA needs to clarify these requirements.

6.0 Requirements for State or Tribal MS4s Non-Traditionals & 7.0 Requirements for Transportation Agencies

Manchester has noted that the requirements for these entities are only a fraction of what is expected of cities and towns. These entities should be subject to the same level of compliance as local government. With the miles of road the NH DOT has to maintain, the hundreds of miles of waterways with outfall discharges, it would be monumental and prohibitively expensive for them to fulfill the requirements as outlined in sections 1.0 through 5.0. Please consider that the communities are no more fiscally sound than the State or Tribal entities.

Overall Comments

The EPA needs to clarify sections of the permit. Several requirements are vague and can be interpreted in different ways. Permit compliance will greatly depend on clarity of the regulations. The timelines should also be reviewed as several are too aggressive to meet in a cost effective manner. Lastly, there are requirements in the first year with dates that contradict each other. We look forward to meeting with you to discuss our concerns further. I anticipate that the permit requirements will not be finalized until such time all comments have been discussed, perhaps at our meeting or at additional public hearings.

Very truly,

Kevin A. Sheppard, P.E.
Public Works Director

Cc: Tim Clougherty
Frederick J. McNeill, P.E.
Robert Robinson
Rick Cantu
Jeff Andrews, NHDES